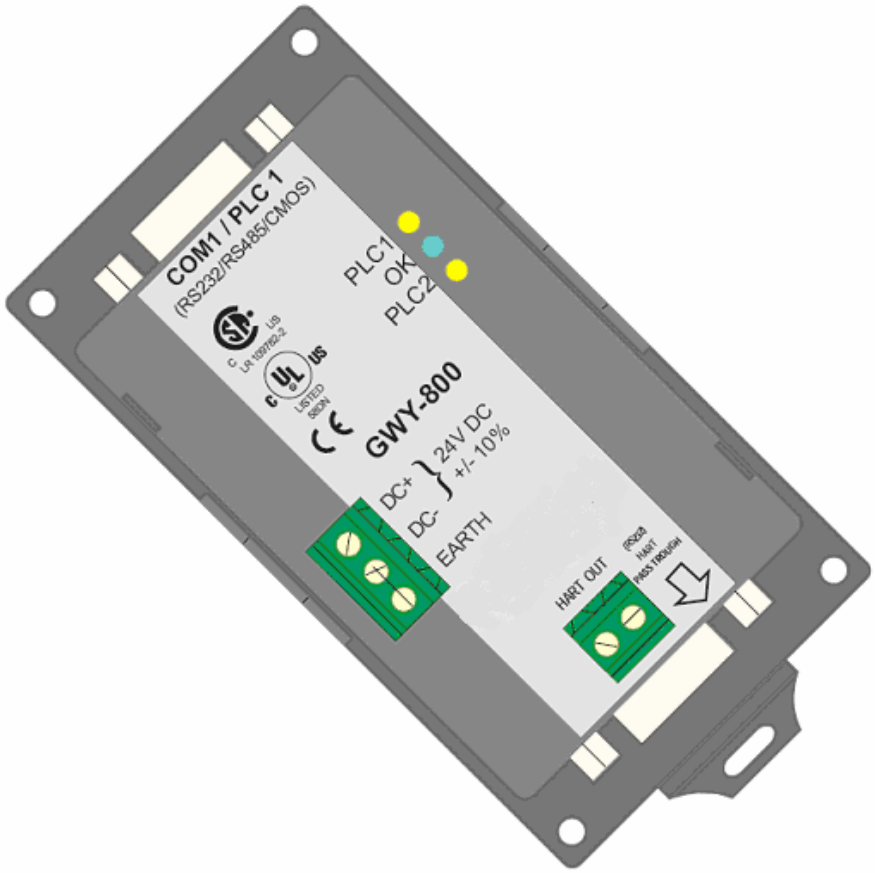
Gateway

Protocol Converter



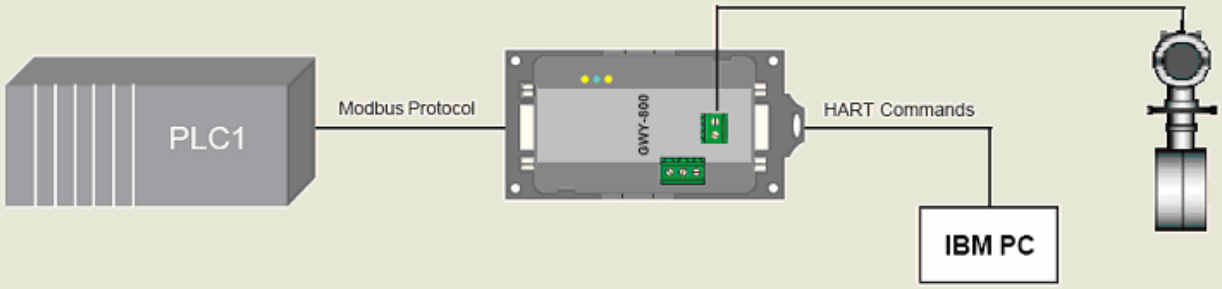
Programmable Industrial HART Gateway with HART Pass Through:

- DIN Rail or Panel Mounted compact Single channel HART Gateway Pass Through
- PLC1 Serial port in any combination of RS232 / RS422 / 2 or 4 wire RS485 / CMOS
- Connects HART device to PLC / SCADA or any serial device. In addition allows configuration software to connect HART device.
- Allows data sharing between HART field devices and other network devices
- Allows multidropping of HART devices.
- Transformer isolatation and capacitive coupling for HART devices. This simplifies loop connection which eliminates Grounding effect.
- Low power consumption
- Common Programming software for the entire Gateway family.....FREE!!
- CE / CSA with UL certification

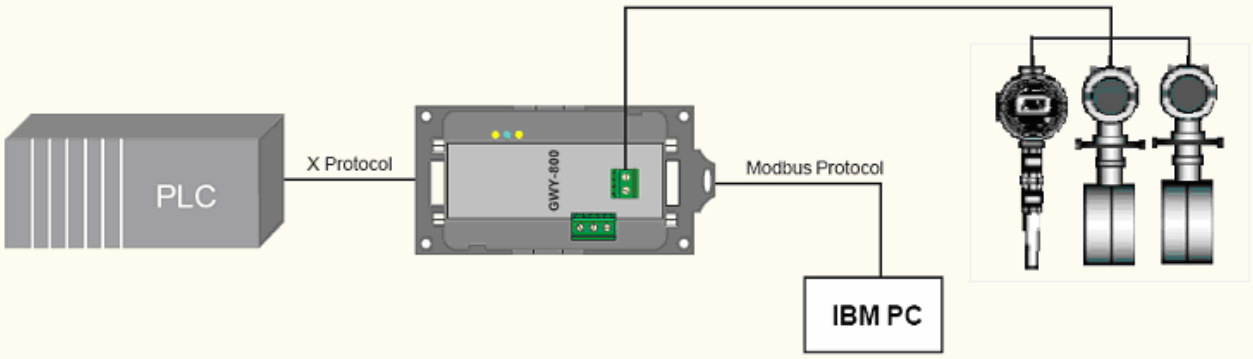
Possible Applications

GWY-800 connects various HART field device to other serial devices irrespective of their protocols. At the same time user can connect configuration software for HART devices.

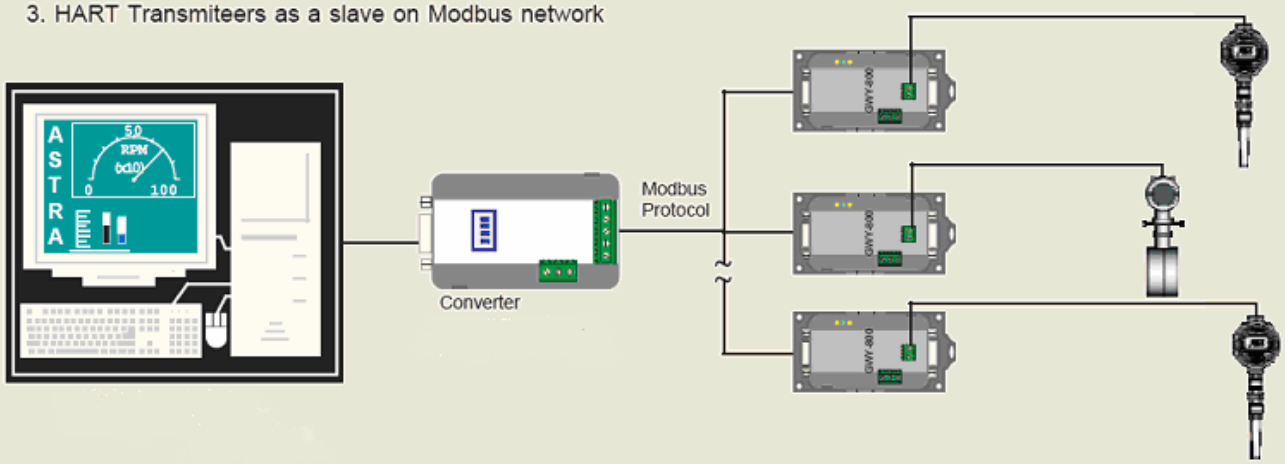
1. PLC to HART Transmitter Communication



2. PLC as master in HART network



3. HART Transmiteers as a slave on Modbus network



* Images not to scale.

Basic GWY-800 Operations

Gateway 800 is a protocol converter as well as the HART modem. This converts the HART digital signal to a serial communication protocol (e.g. MODBUS). This allows various HART field devices to interface directly with serial protocol (MODBUS) based monitoring and control systems. Serial protocol can be master or slave configurable from the set up software. At the same time it allows to communicate the PC based configuration software with HART field devices. Gateway operates in point to point as well as in multi drop HART network mode.

All HART process information, including primary, second, third and fourth process variable data is converted to serial protocol (MODBUS) and available to the host system. Using the Field Device Status Byte data that is available in HART's digital information, the gateway can transmit, via serial link, diagnostic data including smart device configuration changed; primary and non primary variables out of limits; primary variable analog output fixed; cold start; field device malfunction; and more HART status data available.

System requirements for Gateway Setup Software are:

Windows Version	:	Microsoft Windows 9x/NT/2000/XP
Processor	:	PENTIUM or higher
Hard disk Space	:	5 MB or more
Mouse	:	Required
RAM	:	16 MB or more
Display resolution	:	800 X 600 (VGA) or better
Display colors	:	16 bit color

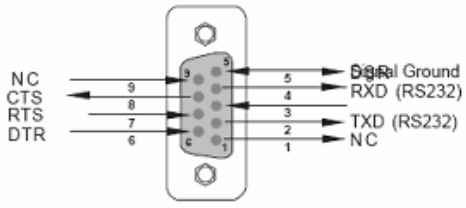
Other Items required for GWY-800 configuration:

1. Gateway unit
2. Gateway Configuration Cable
3. Gateway Setup Software
4. Devices with communication cables

Communication Ports

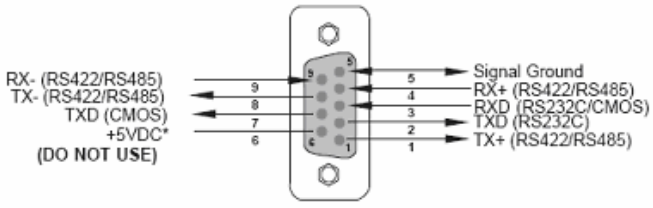
The GWY-800 has two communication ports, PLC1 / COM1 and MODEM. PLC1 / COM1 is compatible to RS232 / RS422 / RS485 and CMOS signal levels. MODEM port has RS232 signals. Pin-out of these ports are as shown below:

Modem Port



DB9 Female

PLC1 / PLC2



DB9 Female

PLC's supported

The GWY-800 currently supports the following PLC's:

• Modbus Master	• Modbus Slave

GWY-800 can communicate with all the above PLC's using different communication cables. Some of the above mentioned PLC's connect to PLC1 / COM1 port and some to MODEM port of Gateway.

Specifications

Power	:	+24V DC ± 10%
LED's	:	3 LED's for status indication
Communication Ports	:	2 Communication ports with
PLC1	:	RS232 / RS422 / RS485 / CMOS
PLC2	:	RS232

(Isolation between communication ports and Power supply, through DC-DC coupler is 1 KV)

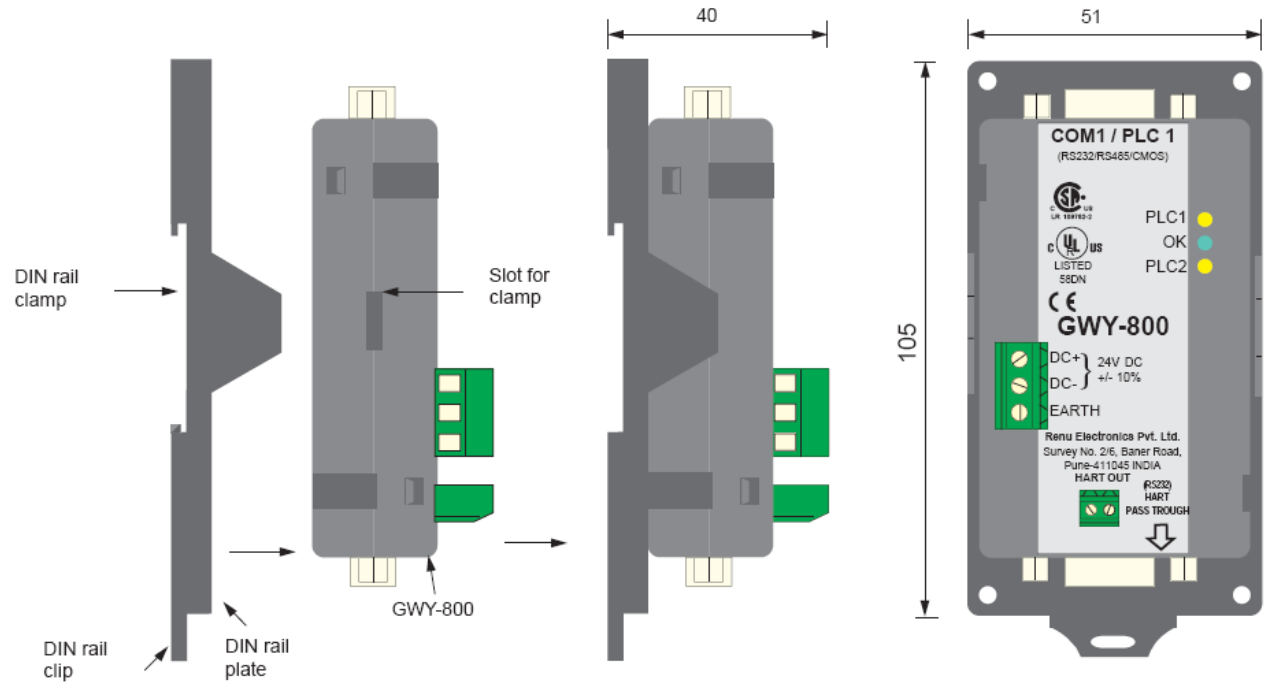
PLC1	:	Connects to PC for setup download or connects to PLC1 at runtime.
PLC2	:	Connects to PC for configuration software.

(Isolation between HART deevices and communication port , through transformer is 1.5KV)

Temperature	:	Operating : 0° to 60°C
		Storage : -20° to 80°C
Humidity	:	10% to 90% (Non condensing)
Mounting	:	DIN rail or back panel mounting
Dimensions (DIN rail)	:	105mm(L) X 40mm(D) X 51mm(W)
Weight	:	125 gm approx.
Certifications	:	CE, CSA, and UL.
Immunity to ESD	:	Level 3 as per IEC1000-4-2
Immunity to Transients	:	Level 3 as per IEC1000-4-4
Immunity to Radiated RF	:	Level 3 as per IEC1000-4-3
Immunity to Conducted RF	:	Level 3 as per IEC1000-4-6
Emissions	:	EN55011 CISPR A

Dimensions

GWY-800 units are shipped with a separate DIN rail plate which can be attached to the unit, if desired. User can use the unit with or without the DIN rail plate. Following sketch shows dimensional details of GWY-800 with the DIN rail plate.



Casuarina Services Pte Ltd
Blk 1004 Toa Payoh North #06-08
Singapore 318995
Tel : 65-67422869 Fax : 65-64578790
Email : sales@casuarina.com.sg
www.casuarina.com.sg